UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

BILLJCO, LLC,

        Plaintiff,

v.

APPLE INC.

        Defendant.

Case No. 6:21-cv-528-ADA

JURY TRIAL DEMANDED

APPLE INC.'S OPENING CLAIM CONSTRUCTION BRIEF

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I.   INTRODUCTION

Plaintiff BillJCo, LLC ("BillJCo") asserts six patents and 41 claims against Defendant

Apple Inc. ("Apple"). This brief addresses nine key claim terms that require construction to

adjudicate this case. For most of these terms, Apple's constructions identify the plain and

ordinary meaning of the term in light of the intrinsic evidence to one of ordinary skill in the art.

For the other terms, Apple's constructions are compelled by the patentee's lexicography or

disavowal of claim scope during prosecution to obtain allowance of the claims.

BillJCo's constructions—and its positions during the meet-and-confer process—are an

entirely different story. Without exception, BillJCo simply incants the phrase "plain and

ordinary" without explaining what that meaning is, or why and how BillJCo disagrees with

Apple's constructions. As such, BillJCo has, to date, ascribed no meaning to these terms.

II.   OVERVIEW OF THE ASSERTED PATENTS

BillJCo asserts the following six patents: U.S. Patent Nos. 8,566,839 ("'839 patent"),

8,639,267 ("'267 patent"), 8,761,804 ("'804 patent"), 9,088,868 ("'868 patent"), 10,292,011

("'011 patent") and 10,477,994 ("'994 patent"). While the asserted patents all claim priority to a

common application, Application No. 12/077,041 filed on March 14, 2008 ("'041 application"),

only the '804 patent claims priority to the '041 application as a continuation. The other five

asserted patents claim priority to the '041 application as a continuation-in-part because they add

new matter to their respective specifications.

The asserted patents generally describe providing location-based services and a location-

based exchange of data between a sending data processing system and a mobile data processing

system. *See, e.g.*, Ex. 1 ('011 patent), 1:36-44. As explained below, three of the patents

generally focus on mobile data processing system ("mobile device") behavior, while the other

three patents generally focus on sending data processing system ("sending device") behavior.

A.   The Mobile Device Patents

The '839, '267 and '868 patents generally focus on the behavior of a mobile device,

including enabling location-based services and the location-based exchange of data. However,

each of these patents focuses on different aspects of enabling such functionality.

The '839 patent generally relates to "managing information for automatic presentation or

distribution," and more specifically to managing an "information" or "messaging" repository

"containing heterogeneous formats for automatically being presented and/or distributed for

certain application events associated with determined data processing system conditions." Ex. 2

('839 patent), 1:31-37. As recited in claim 1, the claimed method for presenting information

requires a mobile device ("receiving data processing system") that receives an "object" that

"contain[s] information and instructions for presenting said information." *Id*., 64:59-63. The

instructions include an "event specification" for "triggering when to present said information."

The event specification includes a "whereabouts condition" for "determining if a location" of the

mobile device is "in a vicinity of another data processing system," and a "condition for detecting

a particular user action." *Id*., 64:63-65:5. The mobile device stores the information and

processes the instructions that it receives in the object, configures a "trigger event" for the event

specification that is included in the instructions, monitors for the occurrence of the trigger event,

recognizes the trigger event when it occurs, and then presents "said information, based at least in

part by said whereabouts condition" upon recognizing the trigger event. *Id*., 65:6-26.

The '267 and '868 patents generally relate to "location based services for mobile data

processing systems" including "location based exchanges of data between distributed mobile

data processing systems for locational applications." Ex. 3 ('267 patent), 1:19-23; Ex. 4 ('868

patent), 1:20-24. In claim 1 of the '267 patent, the claimed method for automatic location-based

exchange processing requires a mobile device that "presents[s]" a "user interface" "for

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configuring privilege data" that "relat[es]" the mobile device with a "remote data processing system. Ex. 3 ('267 patent), 284:14-23. The mobile device "receiv[es]" "whereabouts data," "search[es]" the "privilege data" for a "matching privilege" to "permit trigger of a privileged action," and then "perform[s]" the "privileged action" upon "finding the matching privilege." *Id.*, 284:24-41.

In claim 1 of the '868 patent, the claimed method requires a mobile device that "accept[s] user input" via a "user interface" "for configuring user specified location based event configuration." Ex. 4 ('868 patent), 283:56-60. The mobile device "access[es]" a memory that has stored "a first identifier and a second identifier and a third identifier" where "each identifier is determined by the mobile processing system for at least one location based condition." *Id.*, 283:64-284:3. The mobile device "receiv[es]" a "wireless data record" including the first, second, and third identifiers, "determine[s] the identifier data for the wireless data record," "compar[es] the identifier data" with "the third identifier and the at least one of the first identifier and the second identifier," "determine[s]" that "at least one location based condition" matches "the third identifier and at least one of the first identifier and the second identifier," and then "perform[s]" the "location based action" upon based on the determining. *Id.*, 284:38-65.

B.   The Sending Device Patents

The '804, '011 and '994 patents generally relate to "location based services for mobile data processing systems," including "location based exchanges of data between distributed mobile data processing systems" for "locational applications." Ex. 5 ('804 patent), 1:20-24; Ex. 1 ('011 patent), 1:36-44; Ex. 6 ('994 patent), 1:43-51. While the claimed inventions of the three patents share similarities, each patent focuses on different aspects of enabling such services or the exchange of data.

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In the method of claim 1 of the '804 patent, the "sending data processing system" accesses "identity information," "application information," "location information" and "reference information" that is included in a "wireless data record." Ex. 5 ('804 patent), 117:60-118:20. Once the "data record" is prepared, it is transmitted to "receiving mobile data processing systems" in a "wireless vicinity" of the sending system. *Id*., 118:24-28. The information in the data record may then be used by the receiving mobile data processing systems to "determin[e] their own location relative to the location information." *Id*., 118:43-47.

In the method of claim 1 of the '011 patent, one or more "data processing systems" ("sending devices") periodically beacons outbound a "wireless data record." Ex. 1 ('011 patent), 448:11-27. The "wireless data record" includes (1) a "data field containing a signal strength" of the sending device's system and (2) "application context identifier data." *Id*., 448:31-49. The record includes "no physical location coordinates of the sending data processing system." *Id*., 448:29-30. Upon receiving the wireless data record, a receiving user-carried mobile data processing system can present certain location-based content to its user. *Id*., 448:61-67.

In claim 1 of the '994 patent, which recites a "beaconing data processing system," a sending device periodically beacons outbound a "wireless data record." Ex. 6 ('994 patent), 448:35-43. The "wireless data record" includes (1) a "data field containing a signal strength" of the sending device's system and (2) application identifier data stored in the sending device system's memory. *Id*., 448:60-62. The record includes "no physical location coordinates of the beaconing data processing system." *Id*., 448:58-59. Upon receiving the record, user carried mobile data processing systems can perform "physical location determination processing." *Id*., 448:37-43.

III.   LEVEL OF ORDINARY SKILL IN THE ART

For each of the asserted patents, a person of ordinary skill in the art would have at least a

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bachelor's degree in computer science, computer engineering, or an equivalent, and two years of experience relating to wireless communications. Additional education in wireless systems can make up for a lack in experience, and vice versa.

IV.   DISPUTED CLAIM TERMS

A.   "an object … containing information and instructions for presenting said information" ('839 patent, claim 1)

Apple's Construction	BillJCo's Construction
a self-contained object with both the information for presentation and the instructions describing under what conditions to present that information	Plain and Ordinary Meaning. No Construction Needed.

Apple's construction is compelled by the definitional and disclaiming statements that applicant made during prosecution to avoid prior art. During prosecution of the '839 patent application, the examiner rejected the claims based on invalidating prior art. Ex. 7 ('839 Patent File History (Office Action Dated March 4, 2013)), 2-8. In order to obtain issuance of the claims, applicant amended the independent claims and explained to the examiner that the claimed "object" is "*a self contained object with both the information for presentation and the instructions describing under what conditions to present that information*":

> Applicants' disclosed "object" is a self contained object with both the information for presentation and the instructions describing under what conditions to present that information. Examiner's interpretation of objects of Mousseau ("information", "data items", "messages", "datagrams" cited in the Office Action page 3) are not like the present application objects which additionally contain the instructions.

Ex. 8 ('839 Patent File History (Response Dated May 1, 2013)), 11 (color annotation added). As shown above, the applicant distinguished the prior art Mousseau reference based upon the applicant's definition of "object." *Id*.

Applicants' statement—which begins "Applicants' disclosed 'object' is"—clearly is definitional and applicant is bound by its lexicography during prosecution. *Harold Schoenhaus and Richard M. Jay v. Genesco, Inc. and Johnston & Murphy, Inc.*, 440 F.3d 1354, 1358 (Fed. Cir. 2006) ("The patentee is free to act as his own lexicographer, and may set forth any special definitions of the claim terms in the patent specification or file history, either expressly or impliedly."); *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) ("It is well-established that the patentee can act as his own lexicographer, so long as he clearly states any special definitions of the claim terms in the patent specification or file history."); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.").

Applicant's clear and unambiguous statement during prosecution—by which applicants unequivocally distinguished its invention from prior art that did not include ***both*** "the information" and "the instructions"—constitutes a clear disavowal of claim scope. *SpeedTrack, Inc. v. Amazon.com*, 998 F.3d 1373, 1377-78 (Fed. Cir. 2021) ("[a] patentee may, through a clear and unmistakable disavowal in the prosecution history, surrender certain claim scope to which he would otherwise have an exclusive right by virtue of the claim language.") (*citing Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1324 (Fed. Cir. 2009). Thus, BillJCo cannot now assert that the claims encompass products that do not have "both the information for presentation and the instructions describing under what conditions to present that information."

Moreover, while the applicants' statement here was both definitional and a disclaimer, it at a minimum reflects the applicants' understanding of what this claim term means. *Phillips v.*

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AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005) ("the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention").

The Court should adopt Apple's construction because it correctly reflects applicants' unambiguous statement during prosecution. Apple's construction also is consistent with the plain language of the claim. Specifically claim 1 recites an "object containing information ***and*** instructions for presenting said information." Ex. 2 ('839 patent), 64:61-63 (emphasis added). This claim language, when viewed in the context of the prosecution history of the '839 patent, confirms Apple's construction is correct.

B.   "a Bluetooth communications interface" ('994 patent, claims 1, 8, 14)

Apple's Construction	*BillJCo's Construction*
Bluetooth as defined in version 2.1 + EDR and earlier versions of the Bluetooth Core Specification	*Plain and Ordinary Meaning.* *No Construction Needed.*

The relevant meaning of the "Bluetooth communications interface" is the meaning it had at the time of the claimed invention. *Uniloc USA, Inc. v. Apple, Inc.*, Case No. 19-cv-1692, 2021 WL 432183, at *8 (N.D. Cal. Jan. 15, 2021) (claim terms "Bluetooth messaging" and "Bluetooth protocols" should be limited to functionality described in the Bluetooth Core Specification "as it existed at the time of the claimed invention"); *Fundamental Innovation Sys. Int'l LLC v. Samsung Elecs. Co.*, Case No. 2:17-cv-145-JRG-RSP, 2018 WL 647734, at *11 (E.D. Tex. Jan. 31, 2018) (citation omitted) ("[t]he term 'USB' in the patents-in-suit should be limited to the Universal Serial Bus standards that existed at the time of the claimed invention."); Ex. 9 (*ACQIS LLC v. Samsung Electronics Co., Ltd.*, Case No. 2:20-cv-00295-JRG (E.D. Tex. Sept. 26, 2021)) at 32-33 (stating "the term 'Universal Serial Bus (USB) protocol' must be interpreted as of the priority date" and limiting the scope of the term to USB Rev. 2 and earlier versions).

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The consistent findings of these three cases that industry standard protocol terms should be construed to mean what they meant at the time of the patent is compelled by the bedrock principle of claim construction that claim terms "are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art *at the time of the invention*." *Info-Hold, Inc. v. Applies Media Techs. Corp.*, 783 F.3d 1262, 1265 (Fed. Cir. 2015) (emphasis added) (*citing Phillips*, 415 F.3d at 1312-13). Here, BillJCo contends the '994 patent is entitled to a priority date based on the filing date of Application No. 12/077,041, filed on March 14, 2008. *See* Ex. 10 (BillJCo's Preliminary Infringement Contentions), 1. Based on this contention, "Bluetooth" should be construed to have the same meaning it did as of March 14, 2008. *See Fundamental Innovation*, 2018 WL 647734, at *9 ("[a]n invention cannot comply with standards not yet in existence."). It is indisputable that as of that date, only Bluetooth version 2.1 + EDR and earlier versions existed. Ex. 11 (Foley Decl.), ¶¶ 25-33. A person of ordinary skill in the art thus would have understood "Bluetooth" in the '994 patent to mean Bluetooth versions 2.1 + EDR and earlier. *Id.*, ¶ 32.

Apple's proposed construction correctly construes this term as referring to the Bluetooth specification existing at the time of the patent and earlier versions. Any broader reading of this claim term would improperly encompass Bluetooth standards that did not yet exist. *See* Ex. 11 (Foley Decl.), ¶¶ 25-33. This is improper. *Info-Hold*, 783 F.3d at 1262.

C.   "application" ('011 patent, claims 1, 11, 20; '994 patent, claims 1-3, 8-10, 14-16; '868 patent, claim 1; '804 patent, claims 1, 11)

Apple's Construction	*BillJCo's Construction*
An entity of processing which can be started, terminated, and have processing results. Applications (i.e. executables) can be started as a contextual launch, custom launch through an API or command line, or other launch method of an executable for processing.	*Plain and Ordinary Meaning. No Construction Needed.*

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The patent specification expressly defines the term "application." Apple's construction is taken verbatim from that lexicography and therefore should be adopted.

The specifications of three of the four patents claiming an "application" define the "terminology" "application" to "represent" a specific meaning:

> Also the ***terminology 'application'*** and 'executable' are used interchangeably ***to represent an entity of processing which can be started, terminated, and have processing results***. ***Applications (i.e. executables) can be started as a contextual launch, custom launch through an API or command line, or other launch method of an executable for processing***.

Ex. 1 ('011 patent), 269:53-59 (emphasis added); *see also* Ex. 6 ('994 patent), 269:66-270:5; Ex. 4 ('868 patent), 232:6-12. This clear specification lexicography controls. *3M Innovative Properties Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1374 (Fed. Cir. 2003) ("Because 3M expressly acted as its own lexicographer by providing a definition of 'embossed' in the specification, the definition in the specification controls the meaning of 'embossed', regardless of any potential conflict with the term's ordinary meaning as reflected in technical dictionaries."); *Abbott Laboratories v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) ("inventors may act as their own lexicographers and give a specialized definition of claim terms.").

The specification's use of "terminology" to modify the term "application" confirms the patentee intended to act as its own lexicographer. *See Level Sleep LLC v. Sleep Number Corp.*, 2021 WL 2934816, at *4 (Fed. Cir. 2021 July 13, 2021) (finding the use of "terminology" followed by the disputed claim term indicated the patentee acted as a lexicographer).

Any construction of this term that would be broader than the specification definition would be improper. *See In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002) ("Bass chose to define 'motorized sports boat' in the specification. He cannot change or modify that definition on appeal."); *Sinorgchem Co., Shandong v. International Trade Com'n*, 511 F.3d 1132, 1136 (Fed.

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Cir. 2007) (when the specification "reveal[s] a special definition given to a claim term by the

patentee that differs from the meaning it would otherwise possess … the inventor's lexicography

governs" and "the patentee must be bound by the express definition").

D.   "wireless data record" ('011 patent, claims 1, 11, 20; '868 patent, claim 1;'804 patent, claims 1, 10, 11, 12;'839 patent, claim 23;'994 patent, claims 1, 8, 14)

Apple's Construction	*BillJCo's Construction*
a wirelessly transmitted data record including at least a date/time stamp field, a location field, and a confidence field	*Plain and Ordinary Meaning.* *No Construction Needed.*

Apple's construction of "wireless data record" is taken directly from the specification's

definition of that term and Apple's construction should therefore be adopted. Specifically, the

specification defined the term "wireless data record" to include a "required" "core section" that

includes the fields recited in Apple's construction, including the date/time stamp field, the

location field and the confidence field.

Using the specification of the '011 patent as an example, the specification identifies a

"Wireless Data Record" (also referred to as a "WDR") that "takes on a variety of formats

depending on the context of use." Ex. 1 ('011 patent), 78:50-55. The specification then states

that "there are several parts to a WDR depending on use." *Id.*, 78:55-56. While the specification

next states that the WDR can include some fields in a certain situation (*id.*, 78:56-61), the

specification then unambiguously states that "[t]here is a ***core section*** which ***is required in WDR***

uses." *Id.*, 78:61-62. The specification states that "[t]he core section includes date/time stamp

field 1100*b*, location field 1100*c*, and confidence field 1100*d*." *Id.*, 78:62-64. This same

teaching is included in four of the five patents that recite this claim term. Ex. 4 ('868 patent),

64:47-65:5; Ex. 6 ('994 patent), 78:64-79:23; Ex. 5 ('804 patent), 57:42-57:65.

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The specification's statement that the "core section" is "required" in a WDR stands in sharp contrast to its teaching of what the WDR "may" include. For example, the specification states "[t]here is a transport section of fields wherein any of one of the fields may be used when communicating WDR information between data processing systems," and that "[o]ther fields are of use depending on the MS or applications thereof …" Ex. 1 ('011 patent), 78:64-79:9.

The specification's express requirement that the WDR include a "core section" that has date/time stamp, location and confidence fields is confirmed by Figure 11A. As shown in the color annotation below, WDR 1100 has a distinct "core" that includes the three required fields.
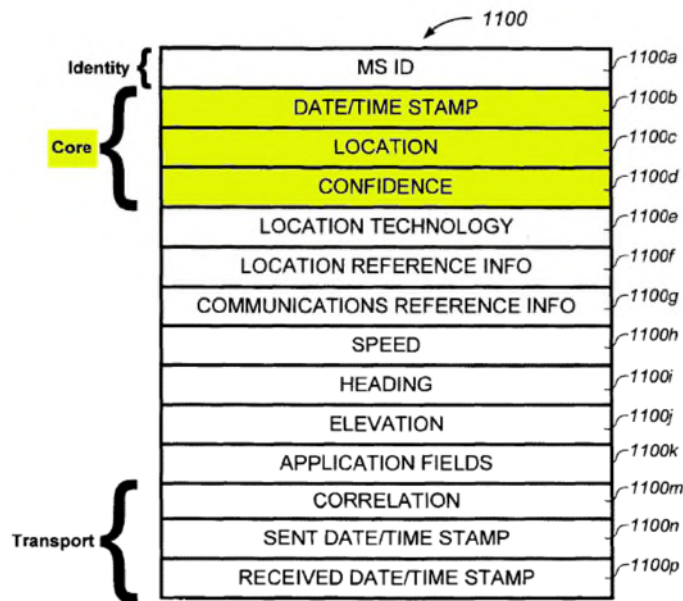
Ex. 1 ('011 patent), Figure 11A (color annotation added); *see also* Ex. 4 ('868 patent), Fig. 11A; Ex. 6 ('994 patent), Fig. 11A; Ex. 5 ('804 patent), Fig. 11A.[1]

Because the specification expressly "requires" that the WDR include a core section that includes a date/time stamp field, a location field and a confidence field, the Court should adopt

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[1] Claim 23 of the '839 patent recites a "wireless data record" and the specification of that patent includes a Figure 7 that is identical to Figure 11A of the '011 patent.

Apple's construction as it faithfully includes that requirement. To instead allow a WDR without the specified core section would contravene the patent's express teaching of what is required and would encompass a use that is neither described nor contemplated by the specification.

> E. **"application context identifier data" ('011 patent, claims 1, 11, 20)**

Apple's Construction	*BillJCo's Construction*
data identifying a context in which the application was presented to a user via a user interface	*Plain and Ordinary Meaning.* *No Construction Needed.*

Apple's construction reflects the plain and ordinary meaning of the claim language and the specification's confirmation that the recited "data" is an identifier of an application context in which the application was presented in a user interface.

First, the claim phrase "application context identifier data" recites "data" that is characterized by the words "application," "context," and "identifier." Ex. 1 ('011 patent), 448:33. The plain and ordinary reading of this phrase is thus "data" that acts as an "identifier" of a "context" of an "application." *Id.* The first part of Apple's construction reflects this plain and ordinary reading of this claim language.

Second, the immediately subsequent claim language confirms the accuracy of the portion of Apple's construction that reads "the application was presented to a user via a user interface." Specifically, claim 1 recites "application context identifier data identifying location based content for ***presenting*** by a location based ***application*** of the receiving user carried mobile data processing system ***to a user interface*** of the receiving user carried mobile data processing system . . ." Ex. 1 ('011 patent), 448:33-39 (emphasis added). The claim language thus itself recites that the "application" is presented to the "user interface."

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Third, the claims must be read in light of the specification, and the specification further

confirms the accuracy of Apple's construction. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1321

(Fed. Cir. 2005) (en banc) ("[p]roperly viewed, the 'ordinary meaning' of a claim term is its

meaning to the ordinary artisan after reading the entire patent."). Specifically, the '011 patent

specification describes "an application context reference which can be successfully compared to

a MS operating system context maintained for comparison to LBX history." Ex. 1 ('011 patent),

151:42-45; *see also id.*, 151:63-66 ("[a]pplication context in use … preferably resolves to an

application context reference which can be successfully compared to a MS operating system

context maintained for comparison."). Thus, the application context identifier data must be data

that can identify a particular application context that can be compared to another context, such as

an "MS operating system context." This understanding is confirmed when the specification

discusses tracking a "history" of application contexts. *Id.*, 329:33-36 ("Any subset of application

fields 1100k can be moved to LBX History 30 for any reason at any time in MS processing, for

example to keep a history of application contexts, states, data, occurrences thereof, etc."686).

Because more than one application context may exist, the claimed "data" must identify a

particular application context; otherwise, it would not be possible to track a history of application

contexts.

The specification also discusses correlating applications via cross-application addressing.

This correlation allows the contexts of one application to "automatically affect features or

contexts of another application." Ex. 1 ('011 patent), 18:12-25. For example, the specification

explains that:

> It is an advantage for facilitating the creation of charters that make sense *in
> context of a particular MS application* by automating suggestions. Special
> terms and atomic operands are determined for *an application context*, and
> candidate charters and/or portions thereof are presented for use to the user

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> based on being derived from the special terms and atomic operands ***determined for the application context***.

Ex. 1 ('011 patent), 15:64-16:3 (emphasis added). This teaching again confirms the importance of identifying the context of an application.

The specification also confirms that a given application context is based on the context in which the application was "focused," *i.e.*, presented to the user via a user interface. For example. the specification describes, with respect to the "[l]ast application context used" parameter, that "user input" is "saved … for ***the context of when the application was focused***." Ex. 1 ('011 patent), 151:42-50 (emphasis added); *see also* FIG. 53 (element 5300*a*/*b*).

A specific example described in the specification is that, while there can be a "variety of [separate] MS applications where an image is detected for being present in the focused user interface," they are all tied together by the same "application context ***where some image is currently presented to the MS user interface***." Ex. 1 ('011 patent), 309:20-22; 309:32-33 (emphasis added). The applications can include a camera mode, browsing/viewing of a captured image, camcorder/video mode, browsing/viewing of a captured video, or editing of a captured photo/video. *Id.*, 309:24-31. Describing the application context as an application "where some image is currently being presented to the MS user interface" is consistent with Apple's construction that "the application was presented to a user via a user interface."

Accordingly, because Apple's construction is consistent with the plain and ordinary meaning of the claim language and the teaching of the specification, Apple's construction should be adopted.

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F.   "an application in use at the sending data processing system" ('804 patent, claim 1)

Apple's Construction	BillJCo's Construction
an application running on the sending data processing system	Plain and Ordinary Meaning. No Construction Needed.

The plain and ordinary meaning of "an application *in use at*" a device requires the application to be *running* on said device. Otherwise, it is not "in use" as required by the claim. Apple's construction applies this plain meaning of "in use at" and thus should be adopted.

Apple's construction is correct for at least three reasons. First, as just stated, the plain clam language supports Apple's construction. The plain and ordinary meaning of "in use at" requires that the application to be in use, as opposed to being inactive, which is the polar opposite of something that is "in use." To find otherwise would be to rewrite the claim to say "an application that *is or is not* in use at the sending data processing system."

Second, the specification's usage of "in use" is entirely consistent with Apple's construction. For example, in describing the application field 1100*k* of a "Wireless Data Record" or "WDR," the specification differentiates between applications that *previously* have been used by the device and applications that *currently* are being used by the device: "application fields [1100*k*] include … application information for applications used, accessed, *or in use by the MS*." Ex. 5 ('804 patent), 26:37-40 (emphasis added). Significantly, claim 1 does not recite an application that has been "used" or "accessed," but instead only recites an application "in use" at the recited system. The specification shows the patentee knew of these different states of an application but chose to only claim an "in use" application.

The specification also equates applications "in use" with applications that have been "started": "[i]n embodiments where the WTV is adjusted in accordance with applications *in use*

at the time, the most demanding requirement of any *application started* is maintained to the

WTV." *Id.*, 75:21-24 (emphasis added).

The specification's usage of "in use" is consistent throughout and requires that the

application be running (*i.e.*, is being used) at the device. *See id.*, 73:66-67 ("is likely dependent

on applications in use at the MS"), 75:11-12 ("in accordance with active applications in use at

the time"), 61:60 ("MS Application(s) in use at time"), 61:61 (similar), 61:62-63 (similar), 62:1

(similar), 62:3-4 (similar), 62:11-12 (similar), 62:13-14 (similar).

Accordingly, because Apple's construction is consistent with the plain and ordinary

meaning of the claim language and the teaching of the specification, Apple's construction should

be adopted.

G.   "an originating identity of the whereabouts data" ('267 patent, claim 1)

Apple's Construction	*BillJCo's Construction*
an identifier that uniquely identifies the device originating the whereabouts data	*Plain and Ordinary Meaning.* *No Construction Needed.*

Apple's construction reflects the plain and ordinary meaning of this claim term to one of

ordinary skill in the art, consistent with the plain language of claim 1 and the specification.

First, claim 1 recites a "mobile data processing system" "receiving, for processing … the

whereabouts data including an originating identity of the whereabouts data." Ex. 3 ('267 patent),

284:24-26. Because the claimed whereabouts data is *received* for processing by the mobile data

processing system, the data must have been transmitted by some other device, such as another

mobile data processing system. *See, e.g.*, *id.*, Abstract ("Mobile data processing systems (MSs)

interact with each other as peers in communications and interoperability."), 29:22-28 ("[c]urrent

technology enables devices to communicate with each other, and other systems, through a

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variety of heterogeneous system and communication methods"). Thus, the plain meaning of "an originating identity" of the whereabouts data that has been received by the mobile data processing system is an identifier that identifies where the data came from, *i.e.*, the identity of the other device that transmitted that data.

Second, the specification consistently describes an "identity" as an identifier that uniquely identifies a device. Figure 11A of the '267 patent (reproduced below) shows a Wireless Data Record 1100 that includes an "Identity" section that includes an "MS ID" (element 1100*a*). Ex. 3 ('267 patent), Figure 11A.
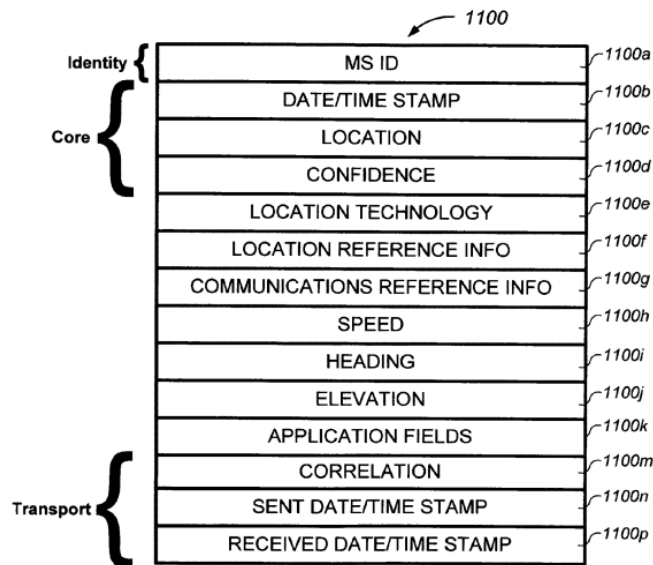
The specification teaches that this MS ID is "a ***unique handle to an MS***" and "may be a phone #, physical or logical address, name, machine identifier, serial number, encrypted identifier, concealable derivative of a MS identifier, correlation, pseudo MS ID, or some other ***unique handle to the MS***." *Id.*, 66:22-27 (emphasis added). The specification provides many other examples showing that an identity is a unique identifier. *See, e.g., id.,* 205:61-206:3 (describing a Wireless Data Record MS ID as "the MS ID (field 1100a) of an in-process WDR … ***distinguished from all other MS IDs***.") (emphasis added), 36:4-14 ("sender – The sender of

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the Send command, typically tied to the originating identity of the action (e.g. email address or

MS ID).”), Fig. 5B (“unique MS ID”), 23:8 (“a unique MS identifier (MS ID)”), 23:9-11 (“the

unique MS identifier (MS ID) may help the <u>MS identify which (e.g. wireless) data is destined for

it</u>”) (emphasis added), 31:30-33 (“[t]he MS is preferably authenticated by a unique MS identifier

such as a phone number, address, name, serial number, or any other unique handle to the MS”),

32:27-28 (“MS ID field 1100*a* is preferably set with: Unique MS identifier of the MS invoking

block 240”), 45:12 (“extracts the unique MS identifier”), 52:49-50 (“MS ID field 1100*a* is

preferably set with: Unique MS identifier of the MS invoking block 240”), 68:45 (“contains

unique MS identifiers”).

Accordingly, because Apple’s construction is consistent with the plain and ordinary

meaning of the claim language and the teaching of the specification, Apple’s construction should

be adopted.

H.   “identity information for describing an originator identity” (’804 patent, claim 1)

Apple’s Construction	BillJCo’s Construction
an identifier that uniquely identifies the originator device	*Plain and Ordinary Meaning.* *No Construction Needed.*

Apple’s construction reflects the plain and ordinary meaning of this claim term to one of

ordinary skill in the art, consistent with the plain language of claim 1 and the specification.

<u>First</u>, claim 1 recites a “sending data processing system” that transmits a wireless data

record including “the identity information for describing the originator identity associated with

the sending data processing system.” Ex. 5 (’804 patent), 118:24-28. The plain meaning of

“identity information for describing an originator identity” is an identifier that uniquely identifies

where the data is coming from, *i.e.*, which device.

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This conclusion is further supported by other surrounding claim language. Specifically, claim 1 requires that the "identity information" be used for "an alert" to notify the receiving mobile data processing systems that they are in the "wireless vicinity of the sending data processing system." Ex. 5 ('804 patent), 118:33-40. The receiving mobile data processing systems must be able to use this identity information to alert themselves that they are in range of a specific sending data processing system; otherwise—if the identity information also applied to other sending systems—the receiving system would not be "alerted" to the particular presence of the sending data processing system that sent the identity information.

Second, the specification consistently describes an "identity" as an identifier that uniquely identifies a device. Figure 11A of the '804 patent (reproduced below) shows a Wireless Data Record 1100 that includes an "Identity" section that has an "MS ID" (element 1100*a*). Ex. 5 ('804 patent), Figure 11A.
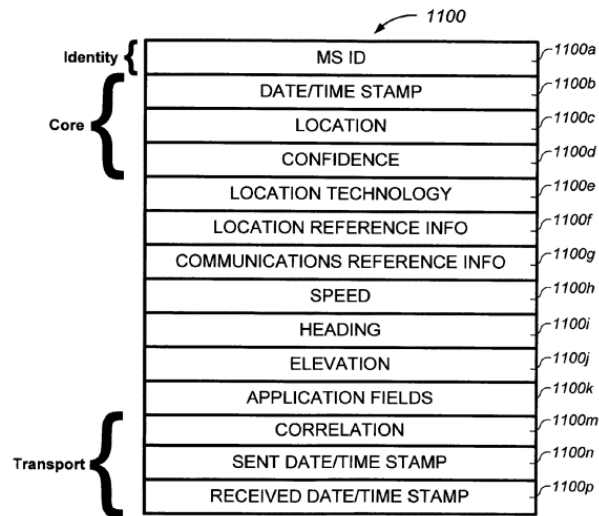
The specification teaches that this MS ID is "*a unique handle to an MS*" and "may be a phone #, physical or logical address, name, machine identifier, serial number, encrypted identifier, concealable derivative of a MS identifier …, or some other *unique handle to the MS*."

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Id., 59:12-17 (emphasis added). The specification includes many other examples showing that

an identity is a unique identifier. *See, e.g., id.*, 14:8-10 ("Sharing a channel will involve carrying

recognizable and processable signatures to distinguish transmissions."), 59:17-19 ("An MS must

be able to distinguish its own unique handle from other MS handles"), 16:13-14 ("the unique MS

identifier (MS ID) may help the MS identify which (e.g. wireless) data is destined for it"), 24:32-

35 ("[t]he MS is preferably authenticated by a unique MS identifier such as a phone number,

address, name, serial number, or any other unique handle to the MS"), 24:29-30 ("MS ID field

1100*a* is preferably set with: Unique MS identifier of the MS invoking block 240"), 38:12

("extracts the unique MS identifier"), 61:33 ("contains unique MS identifiers").

Accordingly, because Apple's construction is consistent with the plain and ordinary

meaning of the claim language and the teaching of the specification, Apple's construction should

be adopted.

I.   "a frame" ('839 patent, claim 24)

Apple's Proposed Construction	BillJCo's Proposed Construction
a single still image	*Plain and Ordinary Meaning.* *No Construction Needed.*

Apple's plain and ordinary meaning construction is consistent with the specification,

surrounding claim language that mirrors the specification, and the understanding of one of

ordinary skill in the art.

First, the term "frame" appears only twice in the specification, both times referring to a

"frame" in an image processing context. The first recitation of a "frame" is included in the

following passage of the specification:

> There are many different message types depending on what formats will or can be supported in field 9850c. Some examples: … video recording types: MPEG-1, MPEG-2, WMV, MOV, AVI, pixel and/or scan line information, *frame sampling rate* information, or any combination of information describing a video recording type for processing.

Ex. 2 ('839 patent), 14:37-47 (emphasis added). A "frame sampling rate" is a well-known concept in video processing. Ex. 11 (Foley Decl.), ¶¶ 37. A "frame rate" refers to the frequency (*i.e*., rate) at which a series of images or frames is captured or displayed, and "sampling" refers to the frequency at which a frame rate is sampled. *Id.*, ¶¶ 37. Thus, a person of ordinary skill in the art would understand the recited "frame" as referring to an image frame.

> The second recitation of "frame" in the specification is included in the following passage:

> If block 10562 determines the user selected to configure a MS movement event for automated AD presentation processing, then block 10564 interfaces with the user for convenient specification of the following information: 1) …; 4) Optional EFR criteria for comparing to automatically recognized data (e.g. text) by the MS as *one or more frames are captured* or "seen" by the MS.

Ex. 2 ('839 patent), 54:38-50 (emphasis added).

Here, the specification is describing the embodiment of Figure 24 of the '839 patent that is described in part at column 54, lines 38 to 50. There, the specification describes that, at block 10562, the system determines if the user wishes to configure a "MS movement event" for "automated [advertising] presentation processing." *Id*. If yes, the logic proceeds to block 10564, where the device "interfaces" with a user to receive various types of user input, including "[o]ptional [Event Filter Record] criteria for comparing to automatically recognized data (e.g. text) by the MS as one or more frames are captured or 'seen' by the MS." *Id*.

A person of ordinary skill in the art would understand that the "one or more frames" that are "captured" refers to capturing an image frame. Ex. 11 (Foley Decl.), ¶¶ 40. This understanding is supported by the specification's subsequent statement that "EFR information is

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used to qualify the event for what the MS 'sees' at the location and movement criteria specified. The charter(s) access the appropriate AppTerm variables for whether or not ***the camera/video input is active*** and a running length of recognition criteria since being activated." Ex. 2 ('839 patent), 54:58-62 (emphasis added). The reference to a "camera" and "video input" immediately after the "one or more frames are captured" language further informs a person of ordinary skill in the art that "one or more frames" that are "captured" refers to capturing image frames. Ex. 11 (Foley Decl.), ¶¶ 35-41.

Second, the surrounding claim language (i.e., "a frame captured by said receiving data processing system") supports Apple's construction because the recited "frame" is "captured" by the receiving data processing system. This claim language is consistent with the specification passage recited above that describes an image frame that is "captured" from a "camera" or "video input" feed. Ex. 2 ('839 patent), 54:38-62.

Accordingly, because Apple's construction is consistent with the teaching of the specification and the surrounding claim language, as understood by one of ordinary skill in the art, Apple's construction should be adopted.

V.   CONCLUSION

Apple respectfully requests that the Court adopt Apple's proposed constructions.

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Dated: December 2, 2021   Respectfully submitted,

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<u>CERTIFICATE OF SERVICE</u>

I certify that the foregoing document was filed electronically on December 2, 2021, pursuant to Local Rule CV-5(a) and has been served on all counsel whom have consented to electronic service via electronic mail. Any other counsel of record will be served by first class U.S. mail on this same date.

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